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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,057	02/02/2005	Hans Bodin	HT-119	4606

7590

10/06/2005

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EXAMINER

BLANKENSHIP, GREGORY A

ART UNIT

PAPER NUMBER

3612

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/523,057	BODIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Greg Blankenship	3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/2/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6, 7, 9-11, 14, 15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dossin et al. (5,040,334) in view of Gehringhoff et al.(6,517,142), further in view of Weber (6,302,473).

Dossin et al. disclose a vehicle door that is attached to a vehicle's front pillar by vertically spaced hinges along the front edge (14) of the door frame (1). The frame (1) has two standing hat beams that are connected by an upper horizontal hat beam and a lower hat beam, as seen in Figure 1. An intermediate side impact beam (3) forms part of the frame (1). The crowns of the hat beams face the interior of the vehicle. The outer flanges of the hat beams are connected to an outer panel (2), as seen in Figure 2. In reference to claims 6, 10-13, and 19, the side impact beam (3) is a hat beam with the crown directed towards the interior of the vehicle. In reference to claims 7, 14-18, and 20, the side impact beam (3) slopes to the back. However, Dossin et al. does not disclose the standing hat beams overlapping their corresponding pillars, the lower hat beam being horizontal, or the frame being made of high strength steel.

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Gehringhoff et al. teach a door structure that has end sections (9") with a profile height that overlap corresponding vehicle pillars (4,5) and using high-strength steel in forming a vehicle door.

Weber discloses a vehicle door that has a horizontal lower beam that connects the standing beams, as seen in Figure 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to:

form the standing beams of Dossin et al. with a profile height such that they overlap their corresponding pillars, as taught by Gehringhoff et al., to improve transmission of compression forces in the vehicle's longitudinal direction from the door to the pillars;

form the frame of Dossin et al. with high-strength steel, as taught by Gehringhoff et al., as an obvious expedient to produce a door with the desired strength; and

form the lower hat beam of Dossin et al. so that it extends in the horizontal direction, as taught by Weber, to reinforce the lower rear corner of the door.

3. Claims 4, 12, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Dossin et al., Gehringhoff et al., and Weber, as applied to claim 3, in view of Weber (6,302,473).

Dossin et al., as modified, does not disclose the profile height of the front standing beam overlapping the corresponding pillar adjacent the upper hinge.

Weber teaches a door frame that has a profiled height that overlaps the front pillar adjacent the upper hinge, as seen in Figures 2 and 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the overlapping profile height of the front standing beam of Dossin et al.

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adjacent the upper hinge, as taught by Weber, to improve the doors ability to transmit compression forces in the vehicle's longitudinal direction to the pillars.

4. Claims 5, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of references, as applied to claim 4.

Dossin et al., as twice modified, does not disclose the overlapping of the front pillar located only adjacent the hinges.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the overlapping profile height of the front standing beam of Dossin et al., as twice modified, such that it is located only adjacent the hinges so that the door is able to efficiently transmit compression forces to the pillars while minimizing materials used that results in minimizing costs and weight.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Dossin et al., Gehringhoff et al, and Weber, as applied to claim 1, in view of Fukumoto et al. (6,231,112).

Dossin et al., as modified, does not disclose the side impact beam located below the upper hinge.

Fukumoto et al. teach a side impact beam (8) that is attached to the front standing beam (51) below the top hinge (9) located on section (51d).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the side impact beam such that it connects the front standing beam below the upper hinge both of Dossin et al., as modified, as taught by Fukumoto et al., to improve safety by locating the side impact beam in the place that it will provide the passenger with the most protection.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Blankenship whose telephone number is 571-272-6656.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gab  
September 30, 2005

  
**PATRICIA L. ENGLE**  
**PRIMARY EXAMINER**  
*Art Unit 3612*